

# Australian Entomological Magazine

*Aust. ent. Mag.*

---

Volume 14, Parts 1, 2

May, 1987

---

## A NEW SPECIES OF *HETEROCONIS* ENDERLEIN (NEUROPTERA, CONIOPTERYGIDAE) FROM WESTERN AUSTRALIA

By T. R. New

Department of Zoology, La Trobe University, Bundoora, Victoria 3083, Australia

### Abstract

*Heteroconis argylensis* sp. n. is described from the Kununurra area of Western Australia.

### Introduction

*Heteroconis* Enderlein is one of the most diverse and characteristic genera of Coniopterygidae in the Australian region (Meinander 1969, 1972). Little attention has been paid to the Australian taxa since Meinander's (1972) revision, although additional species have been described from New Guinea (Tjeder 1973, New in press) and Indonesia (Monserrat 1982).

A small collection of Neuroptera made around the Argyle Diamond Mine in north-west Australia by Mr A. Postle contains a single male of a striking new species, which is described in this note. In general, Coniopterygidae attract little attention from collectors, and progressive documentation of the Australian fauna as material comes to hand is warranted. The same collection also contains two females of *Cryptoscenea evansorum* Smithers (1984), earlier known from Barrow Is. and south west Australia.

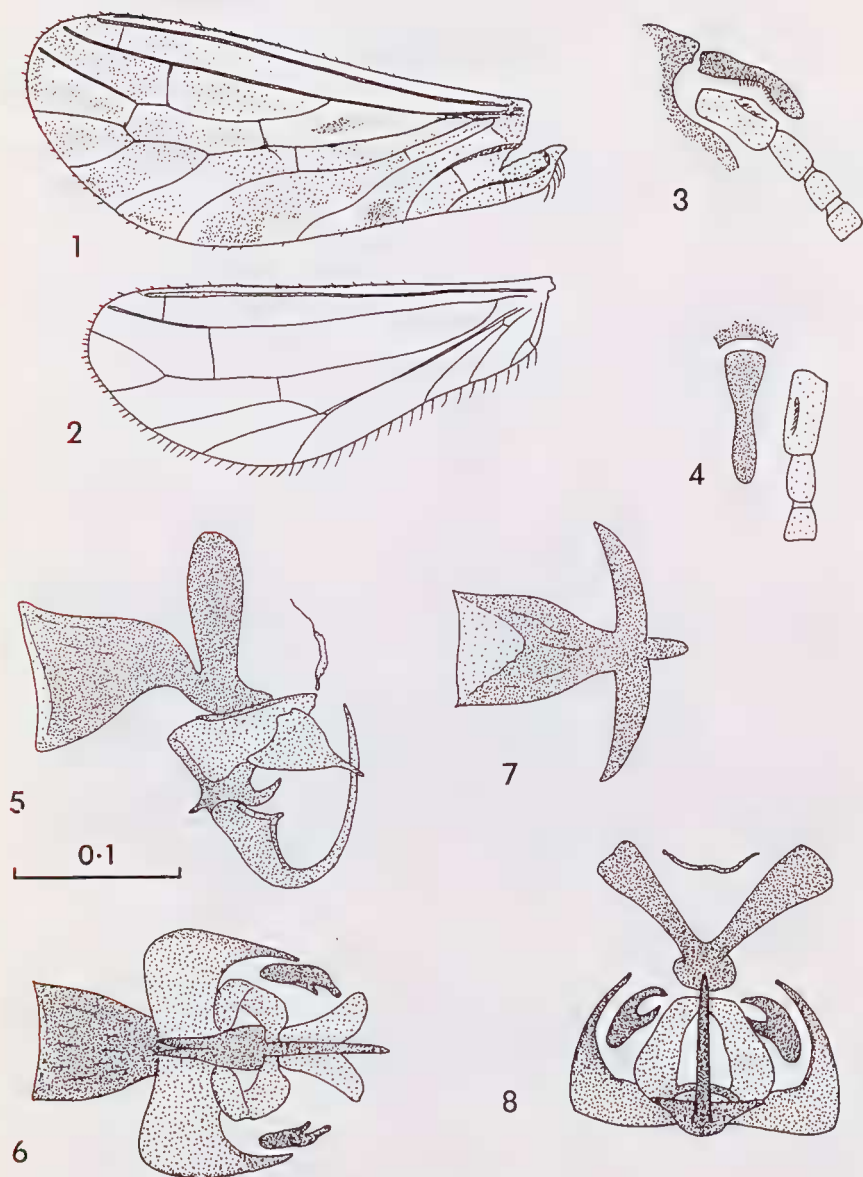
Genitalic terminology follows Tjeder (1973).

### *Heteroconis argylensis* sp.n.

(Figs 1-8)

*Type.* Holotype, ♂, Western Australia, via Kununurra, Argyle Diamond Mine, 12.v.1985, A. Postle (Western Australian Museum, Perth).

*Coloration* (in alcohol). Head dark brown. Eyes black. Palpi and corniform process dark brown. Antennae: scape, pedicel, flagellum 1, 2 buff; flagellum 3, 4 darker brown, rest of flagellum dark brown. Thorax dorsally dark greyish brown, notal spots glossy and almost black; pleura greyish buff. Legs buff: F, apex of T,  $t_5$  dark brown. Forewing (Fig. 1) marked with greyish brown, markings most contrasted near posterior margin, and more



Figs 1-8. *Heteroconis argylensis* sp.n., male: (1) forewing; (2) hindwing; (3) corniform process and base of antenna, lateral; (4) same, anterior; (5) internal genitalia, lateral; (6) same, ventral; (7) penis, dorsal; (8) genitalia, caudal. (Scale in mm).

anterior markings scarcely evident. Hindwing (Fig. 2) very slightly fumose; venation brown.

**Morphology.** Male with curved and centrally constricted corniform process bearing ventral short hairs (Figs 3, 4). Antennae relatively long; scape about twice as long as broad, with dorsal groove; pedicel nearly twice as long as broad; basal flagellar segment longer than broad, remaining segments quadrate or slightly broader than long. Legs normal, tibiae not expanded. Wings fairly narrow, venation as in Figs 1, 2; forewing basal R-M crossvein at second medial thickening; M-Cu crossvein between medial thickenings.

**Male.** Genitalia as in Figs 5-8; penis with strong dorsolateral lobes; gonarcus poorly defined; hypocausta slender, simple, strongly curved dorsally; gonocoxites broad and posteriorly tapered; styli hooked; parma weakly sclerotised.

**Female.** Unknown.

**Measurement.** Forewing 2.1 mm, hindwing 1.9 mm, A 1.1 mm, B 2.2 mm.

**Comments.** Genitalic features clearly differentiate this species from all described *Heteroconis* spp. Several Australian species with marked wings have the forewing M-Cu crossvein between the medial thickenings and a long slender hypocausta, and *H. argylensis* is probably most closely related to *H. enderleini* Meinander, *H. nigricornis* Meinander, *H. planifrontalis* Meinander and *H. varia* Enderlein. Of these, only *H. planifrontalis* has a R-M crossvein close to the second medial thickening, and this species is known from a single male from the Katherine area of the Northern Territory. *H. planifrontalis* lacks a corniform process, and *H. argylensis* differs from it also by having unornamented central flagellar segments and in numerous details of genitalic structure. The hypocausta of *H. enderleini* and *H. nigricornis* is apically furcate, whereas that of *H. planifrontalis* is simple as in the present species.

#### Acknowledgement

I am very grateful to Mr A. Postle for the opportunity to examine Neuroptera collected in Western Australia.

#### References

- Meinander, M., 1969. The genus *Heteroconis* Enderlein, 1905 (Neuroptera, Coniopterygidae). *Not. Ent.* 19: 49-68.
- Meinander, M., 1972. A revision of the family Coniopterygidae (Planipennia). *Acta Zool. Fennica* 136: 1-357.
- Monserrat, V., 1982. Contribucion al conocimiento de los coniopterigidos (Insecta, Neuroptera, Coniopterygidae) de la Region Orientale. *Ann. Mus. civ. storia nat. Genova* 84: 9-39.
- New, T. R., (in press). Coniopterygidae (Neuroptera) from the Wau area of Papua New Guinea. *Neur. Int.*
- Smithers, C. N., 1984. The Neuroptera of Barrow and nearby islands off the west coast of Western Australia. *Aust. ent. Mag.* 11: 61-68.
- Tjeder, B., 1973. Coniopterygidae from the Snow Mountains, New Guinea (Neuroptera). *Ent. Tidskr.* 93: 186-209.